

WHAT IS CLAIMED IS:

- 1        1. A data management method, comprising:
  - 2        receiving multiple user files from at least one client station coupled to a data
  - 3        storage subsystem;
  - 4        storing at least some of the multiple user files in a retrieval storage pool at a first
  - 5        location in the data storage subsystem;
  - 6        creating a managed file comprising an aggregation of at least some of the multiple
  - 7        user files;
  - 8        applying first predetermined criteria to a user file stored in the retrieval storage
  - 9        pool to designate the user file in the retrieval storage pool as one of a higher priority and
  - 10       a lower priority; and
  - 11       deleting from said retrieval storage pool a user file designated as lower priority.
- 1       2. The method of claim 1 further comprising retaining in said retrieval storage
- 2       pool a user file designated as higher priority.
- 1       3. The method of claim 1 wherein said first predetermined criteria include the
- 2       status of the user file as one of active and inactive wherein an active user file currently
- 3       resides on said client station and is designated a higher priority user file, and an inactive
- 4       user file once resided on a client station but has been subsequently at least one of
- 5       modified and deleted on said client station, and is designated a lower priority user file.
- 1       4. The method of claim 1 wherein said retrieval storage pool is located in a disk
- 2       storage.
- 1       5. The method of claim 1 wherein said managed file creating includes copying
- 2       user files to an aggregation storage pool and designating the aggregation of user files in
- 3       the aggregation storage pool as a single file in a database.
- 1       6. The method of claim 5 further comprising transferring said managed file from
- 2       said aggregation storage pool to another location within a data hierarchy in the data
- 3       storage subsystem.
- 1       7. The method of claim 5 wherein said copying includes copying user files from
- 2       the retrieval storage pool to the aggregation storage pool.
- 1       8. The method of claim 5 wherein said aggregation storage pool is located in a
- 2       tape storage.

1       9. The method of claim 6 wherein said managed file is migrated to a tape storage.

1       10. The method of claim 1 further comprising copying received user files to an  
2 aggregation storage pool wherein said managed file creating includes creating a managed  
3 file comprising a contiguous aggregation of said user files copied to said aggregation  
4 storage pool.

1       11. The method of claim 10 further comprising applying second predetermined  
2 criteria to a user file received from a client station to designate the received user file as  
3 one of a higher priority and a lower priority, and wherein said retrieval storage pool  
4 storing includes storing received user files designated as higher priority in said retrieval  
5 storage pool, and wherein said copying to an aggregation storage pool includes copying  
6 received user files designated as lower priority to said aggregation storage pool.

1       12. The method of claim 11 wherein each client station has an identity and said  
2 second predetermined criteria include the identity of the client station which was the  
3 source of a received user file wherein a user file received from a first client station is  
4 designated a higher priority user file and is stored in said retrieval storage pool, and a  
5 user file received from a second client station is designated a lower priority user file and  
6 is stored in said aggregation storage pool.

1       13. The method of claim 12 wherein said first predetermined criteria include the  
2 status of the user file as one of active and inactive wherein an active user file currently  
3 resides on said client station and is designated a higher priority user file, and an inactive  
4 user file once resided on a client station but has been subsequently at least one of  
5 modified and deleted on said client station, and is designated a lower priority user file.

1       14. An article of manufacture for managing data, wherein the article of  
2 manufacture causes operations to be performed, the operations comprising:

3       receiving multiple user files from at least one client station coupled to a data  
4 storage subsystem;

5       storing at least some of the multiple user files in a retrieval storage pool at a first  
6 location in the data storage subsystem;

7       creating a managed file comprising an aggregation of at least some of the multiple  
8 user files;

9 applying first predetermined criteria to a user file stored in the retrieval storage  
10 pool to designate the user file in the retrieval storage pool as one of a higher priority and  
11 a lower priority; and

12 deleting from said retrieval storage pool a user file designated as lower priority.

1 15. The article of claim 14 further comprising the operation of retaining in said  
2 retrieval storage pool a user file designated as higher priority.

1 16. The article of claim 14 wherein said first predetermined criteria include the  
2 status of the user file as one of active and inactive wherein an active user file currently  
3 resides on said client station and is designated a higher priority user file, and an inactive  
4 user file once resided on a client station but has been subsequently at least one of  
5 modified and deleted on said client station, and is designated a lower priority user file.

1 17. The article of claim 14 wherein said retrieval storage pool is located in a disk  
2 storage.

1 18. The article of claim 14 wherein said managed file creating includes copying  
2 user files to an aggregation storage pool and designating the aggregation of user files in  
3 the aggregation storage pool as a single file in a database.

1 19. The article of claim 18 further comprising the operation of transferring said  
2 managed file from said aggregation storage pool to another location within a data  
3 hierarchy in the data storage subsystem.

1 20. The article of claim 18 wherein said copying includes copying user files from  
2 the retrieval storage pool to the aggregation storage pool.

1 21. The article of claim 18 wherein said aggregation storage pool is located in a  
2 tape storage.

1 22. The article of claim 19 wherein said managed file is migrated to a tape  
2 storage.

1 23. The article of claim 14 further comprising the operation of copying received  
2 user files to an aggregation storage pool wherein said managed file creating includes  
3 creating a managed file comprising a contiguous aggregation of said user files copied to  
4 said aggregation storage pool.

1 24. The article of claim 23 further comprising the operation of applying second  
2 predetermined criteria to a user file received from a client station to designate the

3 received user file as one of a higher priority and a lower priority, and wherein said  
4 retrieval storage pool storing includes storing received user files designated as higher  
5 priority in said retrieval storage pool, and wherein said copying to an aggregation storage  
6 pool includes copying received user files designated as lower priority to said aggregation  
7 storage pool.

1 25. The article of claim 24 wherein each client station has an identity and said  
2 second predetermined criteria include the identity of the client station which was the  
3 source of a received user file wherein a user file received from a first client station is  
4 designated a higher priority user file and is stored in said retrieval storage pool, and a  
5 user file received from a second client station is designated a lower priority user file and  
6 is stored in said aggregation storage pool

1 26. The article of claim 25 wherein said first predetermined criteria include the  
2 status of the user file as one of active and inactive wherein an active user file currently  
3 resides on said client station and is designated a higher priority user file, and an inactive  
4 user file once resided on a client station but has been subsequently at least one of  
5 modified and deleted on said client station, and is designated a lower priority user file.

1 27. A subsystem for managing data for use with a plurality of client stations, each  
2 client station having user files, comprising:

3 a plurality of data storage devices wherein at least one data storage device has a  
4 retrieval pool adapted to store user files;

5 a digital data processing apparatus coupled to the storage devices, wherein the  
6 digital data processing apparatus is programmed to perform a data management method,  
7 said method comprising:

8 receiving multiple user files from at least one client station coupled to the  
9 subsystem;

10 storing at least some of the multiple user files in said retrieval storage pool;

11 creating a managed file comprising an aggregation of at least some of the multiple  
12 user files;

13 applying first predetermined criteria to a user file stored in the retrieval storage  
14 pool to designate the user file in the retrieval storage pool as one of a higher priority and  
15 a lower priority; and

16 deleting from said retrieval storage pool a user file designated as lower priority.

1 28. The subsystem of claim 27 wherein the method further comprises retaining in  
2 said retrieval storage pool a user file designated as higher priority.

1 29. The subsystem of claim 27 wherein said first predetermined criteria include  
2 the status of the user file as one of active and inactive wherein an active user file  
3 currently resides on said client station and is designated a higher priority user file, and an  
4 inactive user file once resided on a client station but has been subsequently at least one of  
5 modified and deleted on said client station, and is designated a lower priority user file.

1 30. The subsystem of claim 27 wherein said data storage devices include a disk  
2 storage and wherein said retrieval storage pool is located in said disk storage.

1 31. The subsystem of claim 27 further comprising a database and wherein at least  
2 one data storage device has an aggregation storage pool and wherein said managed file  
3 creating includes copying user files to said aggregation storage pool and designating the  
4 aggregation of user files in the aggregation storage pool as a single file in said database.

1 32. The subsystem of claim 31 wherein a plurality of said data storage devices are  
2 arranged in a data hierarchy and wherein the method further comprises transferring said  
3 managed file from said aggregation storage pool to another location within said data  
4 hierarchy.

1 33. The subsystem of claim 31 wherein said copying includes copying user files  
2 from the retrieval storage pool to the aggregation storage pool.

1 34. The subsystem of claim 31 wherein said data storage devices include a tape  
2 storage and wherein said aggregation storage pool is located in said tape storage.

1 35. The subsystem of claim 32 wherein said data storage devices include a tape  
2 storage and wherein said managed file is migrated to said tape storage.

1 36. The subsystem of claim 27 further comprising a database and wherein at least  
2 one data storage device has an aggregation storage pool and wherein the method further  
3 comprises copying received user files to said aggregation storage pool wherein said  
4 managed file creating includes creating a managed file comprising a contiguous  
5 aggregation of said user files copied to said aggregation storage pool.

1 37. The subsystem of claim 36 further comprising the operation of applying  
2 second predetermined criteria to a user file received from a client station to designate the

3 received user file as one of a higher priority and a lower priority, and wherein said  
4 retrieval storage pool storing includes storing received user files designated as higher  
5 priority in said retrieval storage pool, and wherein said copying to an aggregation storage  
6 pool includes copying received user files designated as lower priority to said aggregation  
7 storage pool.

1 38. The subsystem of claim 37 wherein each client station has an identity and said  
2 second predetermined criteria include the identity of the client station which was the  
3 source of a received user file wherein a user file received from a first client station is  
4 designated a higher priority user file and is stored in said retrieval storage pool, and a  
5 user file received from a second client station is designated a lower priority user file and  
6 is stored in said aggregation storage pool

1 39. The subsystem of claim 38 wherein said first predetermined criteria include  
2 the status of the user file as one of active and inactive wherein an active user file  
3 currently resides on said client station and is designated a higher priority user file, and an  
4 inactive user file once resided on a client station but has been subsequently at least one of  
5 modified and deleted on said client station, and is designated a lower priority user file.

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1 40. A server for managing data for use with at least one data storage device and  
2 with a plurality of client stations, each client station having user files, comprising:  
3 data processing means for managing data, said data processing means having  
4 means for:

5 creating a retrieval storage pool in a data storage device;

6 receiving multiple user files from at least one client station coupled to the server;

7 storing at least some of the multiple user files in said retrieval storage pool;

8 creating a managed file comprising a contiguous aggregation of at least some of  
9 the multiple user files;

10 applying first predetermined criteria to a user file stored in the retrieval storage  
11 pool to designate the user file in the retrieval storage pool as one of a higher priority and  
12 a lower priority; and

13 deleting from said retrieval storage pool a user file designated as lower priority.

1           41. The server of claim 40 wherein the data processing means further has means  
2 for retaining in said retrieval storage pool a user file designated as higher priority.

1           42. The server of claim 40 wherein said first predetermined criteria include the  
2 status of the user file as one of active and inactive wherein an active user file currently  
3 resides on said client station and is designated a higher priority user file, and an inactive  
4 user file once resided on a client station but has been subsequently at least one of  
5 modified and deleted on said client station, and is designated a lower priority user file.

1           43. The server of claim 40 wherein said data storage devices include a disk  
2 storage and wherein said retrieval storage pool is located in said disk storage.

1           44. The server of claim 40 wherein said data processing means further has a  
2 database and wherein at least one data storage device has an aggregation storage pool and  
3 wherein said managed file creating includes copying user files to said aggregation storage  
4 pool and designating the aggregation of user files in the aggregation storage pool as a  
5 single file in said database.

1           45. The server of claim 44 wherein a plurality of said data storage devices are  
2 arranged in a data hierarchy and wherein the data processing means further has means for  
3 transferring said managed file from said aggregation storage pool to another location  
4 within said data hierarchy.

1           46. The server of claim 40 wherein said data processing means further has a  
2 database and wherein at least one data storage device has an aggregation storage pool and  
3 wherein the data processing means further has means for copying received user files to  
4 said aggregation storage pool wherein said managed file creating includes creating a  
5 managed file comprising a contiguous aggregation of said user files copied to said  
6 aggregation storage pool.

1           47. The server of claim 46 wherein the data processing means further has means  
2 for applying second predetermined criteria to a user file received from a client station to  
3 designate the received user file as one of a higher priority and a lower priority, and  
4 wherein said retrieval storage pool storing includes storing received user files designated  
5 as higher priority in said retrieval storage pool, and wherein said copying to an  
6 aggregation storage pool includes copying received user files designated as lower priority  
7 to said aggregation storage pool.

1           48. The server of claim 47 wherein each client station has an identity and said  
2 second predetermined criteria include the identity of the client station which was the  
3 source of a received user file wherein a user file received from a first client station is  
4 designated a higher priority user file and is stored in said retrieval storage pool, and a  
5 user file received from a second client station is designated a lower priority user file and  
6 is stored in said aggregation storage pool

1           49. The server of claim 48 wherein said first predetermined criteria include the  
2 status of the user file as one of active and inactive wherein an active user file currently  
3 resides on said client station and is designated a higher priority user file, and an inactive  
4 user file once resided on a client station but has been subsequently at least one of  
5 modified and deleted on said client station, and is designated a lower priority user file.

1           50. A data management method, comprising:

2           receiving multiple user files from at least one client station coupled to a data  
3 storage subsystem;

4           storing at least some of the multiple user files in a retrieval storage pool at a first  
5 location in the data storage subsystem;

6           creating a managed file comprising an aggregation of at least some of the multiple  
7 user files, wherein said managed file creating includes copying user files to an  
8 aggregation storage pool and designating the aggregation of user files in the aggregation  
9 storage pool as a single file in a database.;

10          applying first predetermined criteria to a user file stored in the retrieval storage  
11 pool to designate the user file in the retrieval storage pool as one of a higher priority and  
12 a lower priority;

13          deleting from said retrieval storage pool a user file designated as lower priority;  
14 and

15          retaining in said retrieval storage pool a user file designated as higher priority.

1           51. The method of claim 50 wherein said first predetermined criteria include the  
2 status of the user file as one of active and inactive wherein an active user file currently  
3 resides on said client station and is designated a higher priority user file, and an inactive  
4 user file once resided on a client station but has been subsequently at least one of  
5 modified and deleted on said client station, and is designated a lower priority user file.



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1       52. The method of claim 50 further comprising applying second predetermined  
2 criteria to a user file received from a client station to designate the received user file as  
3 one of a higher priority and a lower priority, and wherein said retrieval storage pool  
4 storing includes storing received user files designated as higher priority in said retrieval  
5 storage pool, and wherein said copying to an aggregation storage pool includes copying  
6 received user files designated as lower priority to said aggregation storage pool.

1       53. A data management method, comprising:

2       receiving multiple user files from at least one client station coupled to a data  
3 storage subsystem;

4       applying first predetermined criteria to a user file received from a client station to  
5 designate the received user file as one of a higher priority and a lower priority;

6       storing user files designated a higher priority in a retrieval storage pool in a disk  
7 storage in the data storage subsystem;

8       creating a managed file comprising a contiguous aggregation of multiple user files  
9 each designated lower priority, wherein said managed file creating includes copying  
10 lower priority user files to an aggregation storage pool in a tape drive and designating the  
11 aggregation of user files in the aggregation storage pool as a single file in a database.;

12       applying second predetermined criteria to a user file stored in the retrieval storage  
13 pool to designate the user file in the retrieval storage pool as one of active and inactive  
14 wherein an active user file currently resides on said client station and is designated a  
15 higher priority user file, and an inactive user file once resided on a client station but has  
16 been subsequently at least one of modified and deleted on said client station, and is  
17 designated a lower priority user file;

18       deleting from said retrieval storage pool a user file designated as inactive; and  
19       retaining in said retrieval storage pool a user file designated as active.

1       54. The method of claim 53 wherein each client station has an identity and said  
2 first predetermined criteria include the identity of the client station which was the source  
3 of a received user file wherein a user file received from a first client station is designated  
4 a higher priority user file and is stored in said retrieval storage pool, and a user file

- 5 received from a second client station is designated a lower priority user file and is stored
- 6 in said aggregation storage pool.